(FILE 'HOME' ENTERED AT 14:14:45 ON 06 JAN 2003)

	FILE 'CAPL	JS	' ENTERED AT 14:14:55 ON 06 JAN 2003
L1	22795	s	CYCLODEXTRIN
L2	29158	s	NICOTINIC
L3	18033	s	NICOTINAMIDE
L4	4739	s	NIACIN
L5	851	s	NIACINAMIDE
L6	49076	s	L2 OR L3 OR L4 OR L5
L7	82	s	L1 AND L6
L8	266787	s	SOLUBILITY OR SOLUBILIZ?
L9	15	s	L7 AND L8

ACCESSION NUMBER:

ANSWER 1 OF 15 CAPLUS COPYRIGHT 2003 ACS

2002:72162 CAPLUS

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DOCUMENT NUMBER:
                             136:107569
                             Gel compositions containing metronidazole and
TITLE:
                             hydroxypropyl-.beta.-cyclodextrin
                             Chang, Yunik; Dow, Gordon J.; Angel, Arturo
INVENTOR (S):
PATENT ASSIGNEE(S):
                             Dow Pharmaceutical Sciences, USA
                             PCT Int. Appl., 35 pp.
                             CODEN: PIXXD2
DOCUMENT TYPE:
                             Patent
LANGUAGE:
                             English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                        KIND DATE
                                                 APPLICATION NO. DATE
      -----
                                                   ______
      WO 2002006349
                          A1 20020124
                                                  WO 2001-US19644 20010619
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
               RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                               US 2000-615169 20000713
US 2000-615169 A 20000713
                         B1 20021022
     US 6468989
PRIORITY APPLN. INFO.:
   An aq. soln. of metronidazole in which the concn. of metronidazole is
     >0.75 is described. The soln. contains the soly. enhancer hydroxypropyl-.beta.-cyclodextrin (I) and may addnl. contain
      niacinamide. Methods of manuf. and therapeutic use of the soln.
      are disclosed. Thus, a stable 1.0% aq. gel compn. contained metronidazole
      1.00, I 5.00, methylparaben 0.15, propylparaben 0.03, glycerin 5.00,
     hydroxyethyl cellulose 1.50, disodium edetate 0.05, and water qs to 100%.
                       3
REFERENCE COUNT:
                                    THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
                                    RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L9 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER:
                             2001:380370 CAPLUS
DOCUMENT NUMBER:
                             135:9995
TITLE:
                             Pharmaceuticals containing sildenafil for treating
                             male erectile dysfunction
INVENTOR(S):
                             Vallabhaneni, Ramakrishna Rao
PATENT ASSIGNEE(S):
                             Natco Pharma Ltd., India
                             PCT Int. Appl., 19 pp.
                             CODEN: PIXXD2
DOCUMENT TYPE:
                             Patent
LANGUAGE:
                             English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                        KIND DATE
                                                 APPLICATION NO. DATE
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     WO 2001035926 A2 20010525
WO 2001035926 A3 20011227
                                                 WO 2000-IN105
                                                                       20001024
          W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
               CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
               IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
               SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
               AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
               DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1237538
                         A2 20020911
                                                 EP 2000-990872 20001024
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC; PT, IE, SI, LT, LV, FI, RO, MK, CY, AL
PRIORITY APPLN. INFO.:
                                               IN 1999-MA1128 A 19991118
WO 2000-IN105 W 20001024
     The invention relates to a novel pharmaceutical compn. contq. sildenafil
     useful for nasal administration in the treatment of male erectile dysfunction due to a variety of causes. The compn. is also effective in
     patients with erectile dysfunction due to spinal cord injury. The
     pharmaceutical compn. is in the form of a soln. or a colloidal dispersion
     in a vehicle filled into a specially designed dosing device for nasal
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administration. The invention also provides a method for prepg. the

compn. contg. sildenafil for masal application for the treatment of male erectile dysfunction. Thus, a formulation contained sildenafil citrate 10.000, PEG-300 30.000, glycerol 20.000, and HCl 10.000% and water to 1.0

ANSWER 3 OF 15 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2000:642586 CAPLUS

DOCUMENT NUMBER: 133:308801

TITLE: Reconstitution of conformationally dependent epitopes

on the N-terminal extracellular domain of the human muscle acetylcholine receptor .alpha. subunit expressed in Escherichia coli: implications for

myasthenia gravis therapeutic approaches

AUTHOR(S): Tsouloufis, Theodoros; Mamalaki, Avgi; Remoundos,

Michael; Tzartos, Socrates J.

CORPORATE SOURCE: Department of Biochemistry, Hellenic Pasteur

Institute, Athens, 11521, Greece

International Immunology (2000), 12(9), 1255-1265 CODEN: INIMEN; ISSN: 0953-8178 SOURCE:

Oxford University Press PUBLISHER:

DOCUMENT TYPE: Journal LANGUAGE: English

Myasthenia gravis (MG) is an autoimmune disease, caused by autoantibodies against the muscle acetylcholine receptor (AChR), an oligomeric transmembrane glycoprotein composed of .alpha.2.beta..gamma..delta. subunits. The alpha subunit carries in its N-terminal extracellular domain the main immunogenic region (MIR), a group of conformationally dependent epitopes that seems to be a major target for the anti-AChR antibodies in MG patients. Detailed epitope studies on pathogenic anti-AChR antibodies have been hindered because the binding of most of these antibodies is conformationally dependent, which precludes the use of denatured AChR fragments. The N-terminal extracellular fragment, residues 1-207, of the human AChR .alpha. subunit was expressed in Escherichia coli in a denatured form, solubilized in a guanidinium hydrochloride-contg. buffer, purified, and renatured using a refolding approach which employs a detergent and a cyclodextrin as "artificial chaperones". Compared with the non-refolded protein, the refolded mol. exhibited a dramatic improvement in terms of the binding of all anti-MIR mAb tested. Anti-MIR mAb that normally bind weakly to the denatured .alpha. subunit bound .apprx.30-100 times better to the refolded polypeptide and other anti-MIR mAb that bind exclusively to completely conformationally dependent epitopes also bound quite efficiently. These results, in addn. to providing a means for the thorough investigation of the antigenic structure of the AChR, show that the conformationally dependent MIR epitopes do not require the participation of the oligosaccharide moiety of the .alpha. subunit nor the contribution of neighboring subunits for antibody binding. Such AChR fragments may be used in structural studies of the AChR autoantigen, and should prove valuable in the understanding and development of therapeutic approaches for MG.

REFERENCE COUNT: THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:129840 CAPLUS

DOCUMENT NUMBER: 132:260007

Propofol in anesthesia. Mechanism of action, TITLE:

structure-activity relationships, and drug delivery AUTHOR (S): Trapani, Giuseppe; Altomare, Cosimo; Sanna, Enrico;

Biggio, Giovanni; Liso, Gaetano

Dipartimento Farmaco-Chimico, Facolta di Farmacia, CORPORATE SOURCE: Universita degli Studi di Bari, Bari, 70125, Italy

SOURCE: Current Medicinal Chemistry (2000), 7(2), 249-271

CODEN: CMCHE7; ISSN: 0929-8673 PUBLISHER: Bentham Science Publishers DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

A review with 112 refs. Propofol (2,6-diisopropylphenol) is becoming the i.v. anesthetic of choice for ambulatory surgery in outpatients. It is extensively metabolized, with most of the administered dose appearing in the urine as glucuronide conjugates. Favorable operating conditions and rapid recovery are claimed as the main advantages in using propofol, whereas disadvantages include a relatively high incidence of apnea, and blood pressure redns. Besides a literature summary of the pharmacodynamics, pharmacokinetics, toxicol., and clin. use, this review provides a deeper discussion on the current understanding of mechanism of action and structure-activity relationships, and recent findings on drug delivery technologies as applied to the improvement of propofol

formulations. The action of propofol involves a pos. modulation of the inhibitory function of the neurotransmitter .gamma.-aminobutyric acid (GABA) through GABAA receptors. Recent results from recombinant human GABAA receptor expts. and findings from the work exploring the effects at other receptors (e.g., glycine, nicotinic, and M1 muscarinic receptors) are reviewed. Studies showing its antiepileptic and anxiolytic properties are also discussed. The structure-activity relationships (SAR) of series of alkylphenols and p-X-substituted congeners have been reinvestigated. Interestingly, unlike the other congeners tested so far, p-iodo-2,6-diisopropylphenol displayed anticonvulsant and anticonflict effects, but not sedative-hypnotic and anesthetic properties. Due to its high lipid-soly., propofol was initially formulated as a soln. with the surfactant Cremophor EL, but the occurrence of pain on injection and anaphylactoid reactions prompted to search for alternative formulations. Results from using cyclodextrins, water-sol. prodrugs, and adopting Bodor's approach to the site-specific chem. delivery system (CDS), as well as the advantages provided by computer-controlled infusion systems, are examd. in some detail. REFERENCE COUNT: THERE ARE 112 CITED REFERENCES AVAILABLE FOR 112 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 15 CAPLUS COPYRIGHT 2003 ACS 1999:457628 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

CORPORATE SOURCE:

131:204473

TITLE:

Increased aqueous solubility of

N-(7-oxododecanoyl)-L-alanyl-D-isoglutamine by coprecipitating with various pharmaceutical carriers Planinsek, Odon; Pisek, Robert; Kristl, Albin;

AUTHOR(S):

Schmidt, Peter C.; Srcic, Stanko

Faculty of Pharmacy, University of Ljubljana,

Ljubljana, 1000, Slovenia

SOURCE:

Acta Pharmaceutica (Zagreb) (1999), 49(2), 89-98

CODEN: ACPHEE; ISSN: 1330-0075 Croatian Pharmaceutical Society

PUBLISHER: DOCUMENT TYPE:

Journal

LANGUAGE:

English

 $\hbox{N-(7-oxododecanoyl)-L-$alanyl-$D$-$isoglutamine, which is a modified}$ N-acetylmuramyl-L-alanyl-D-isoglutamine (MDP, the smallest immunol. active glucopeptide's subunit of the bacterial cell wall), was chosen after immunorestoration tests for further preclin. testing. For the prepn. of an appropriate parenteral formulation, the soly. of the compd. has to be increased. For this purpose different phys. mixts. and solid dispersions prepd. by solvent evapn. method with different carriers were investigated. The soly. of N-(7-oxododecanoyl)-L-alanyl-Disoglutamine increased from 0.16 g L-1 to 27 g L-1 for the dispersion with nicotinamide, to 40 g L-1 for the dispersion with sodium salicylate and to 24 g L-1 for the complex with 2-hydroxypropyl-.beta.cyclodextrin.

ANSWER 6 OF 15 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER:

DOCUMENT NUMBER:

1999:172599 CAPLUS

130:213640

TITLE:

New pharmaceutical compositions of meloxicam with

improved solubility and bioavailability

INVENTOR(S):

Struengmann, Andreas; Freudensprung, Brigitte;

Klokkers, Karin

PATENT ASSIGNEE(S):

Hexal A.-G., Germany

SOURCE:

PCT Int. Appl., 40 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.			KI	KIND DATE				APPLICATION NO.					DATE				
WO 9909988			A1 19990304				WO 1998-EP5456 19980827										
	W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	HU,	ID,	IL,	IS,	JP,	ΚE,	KG,	KΡ,
		KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,
		NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	UA,
		UG,	US,	UZ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM	
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	ŬĠ,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	ES,
		FI,	FR.	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,
		CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG						
CA	CA 2301304			AA 19990304				CA 1998-2301304				04	19980827				
AU 9894374				A1 19990316					AU 1998-94374 19980827								

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AU 750125
                        B2 20020711
     ZA 9807800
                        Α
                             19990609
                                             ZA 1998-7800
                                                                19980827
                           20000614
                                             EP 1998-947467 19980827
     EP 1007049
                        A1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     BR 9812018
                             20000926
                                              BR 1998-12018
                                                                19980827
                             20010904
                                              JP 2000-507378
                                                                19980827
                        T2
     JP 2001513563
                        B1
                                                                20000510
                                             US 2000-486463
     US 6284269
                             20010904
                                          EP 1997-114816 A 19970827
WO 1998-EP5456 W 19980827
PRIORITY APPLN. INFO.:
                                           WO 1998-EP5456
     Pharmaceutical compns. contg. enolic carboxamide type antiinflammatory
     agent meloxicam that exhibit improved wettability, aq. soly.,
     dissoln. behavior over a broad range of pH, and that are prepd. by crystal
     structure modification of the drug through dry or wet mech. homogenization
     with two further components - one of them is selected from a group of
     oligo - and dissoln. improving, or alkalizing agent. The application of
     the formulations according to the present invention results in an improved
     bioavailability and effectiveness of meloxicam. Thus, 16 g hydroxypropyl
     .beta.-cyclodextrin was mixed with 1.8 g of meloxicam and the
     mixt. was then further co-milled for 3 h at 25.degree. to reach desired
     metastable phys. state. A hydrogel formulation contained above powder
     100.0, hydroxypropyl Me cellulose 21.0, propylene glycol 2500.0,
     PEG-7-glyceryl conconate 300.0, iso-Pr alc. 500.0, and water 6385.0 mg.
RENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                                 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 7 OF 15 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER:
                          1997:724416 CAPLUS
DOCUMENT NUMBER:
                          128:16342
TITLE:
                          Increasing solubility of
                          N-(7-oxododecanoyl)-L-alanyl-D-isoglutamine in water
                          solutions
AUTHOR (S):
                          Planinsek, O.; Srcic, S.; Kristl, A.
CORPORATE SOURCE:
                          Faculty of Pharmacy, Univ. of Ljubljana, Ljubljana,
                          1000, Slovenia
                          Farmacevtski Vestnik (Ljubljana) (1997), 48 (Pos.
SOURCE:
                          Stev.), 274-275
                          CODEN: FMVTAV; ISSN: 0014-8229
PUBLISHER:
                          Slovensko Farmacevtsko Drustvo
DOCUMENT TYPE:
                          Journal
LANGUAGE:
                          English
     Using carriers nicotinamide, Na salicylate, 2-hydroxypropyl
     .beta.-cyclodextrin (HPC) and lecithin, the water soly
     . of N-(7-oxododecanoy1)-L-alany1-D-isoglutamine (I) was increased. Results show a nonequil. state and they decrease after a certain time.
     However, the solubilities remain higher than soly. of
     pure I which can be attributed to disruption of the water structure.
     Complexes were formed in the case of Na salicylate, nicotinamide, and HPC, and vesicles were formed in the case of lecithin.
    ANSWER 8 OF 15 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER:
                          1993:175664 CAPLUS
DOCUMENT NUMBER:
                          118:175664
                          Effect of hydrotropic substances on the complexation
TITLE:
                          of clotrimazole with .beta.-cyclodextrin
AUTHOR (S):
                          Pedersen, Morten
CORPORATE SOURCE:
                          Dep. Pharm., R. Dan. Sch. Pharm., Copenhagen, DK 2100,
                          Den.
SOURCE:
                          Drug Development and Industrial Pharmacy (1993),
                          19(4), 439-48
CODEN: DDIPD8; ISSN: 0363-9045
DOCUMENT TYPE:
                          Journal
LANGUAGE:
                          English
     The phase diagrams of clotrimazole/.beta.-cyclodextrin
     (.beta.-CD) in phosphate buffer, pH 7.1, contg. 0.5M various hydrotropic
     agents were constructed. The water structure disruptors, urea and
     nicotinamide, increased the intrinsic soly. of the
     antimycotic drug clotrimazole, while the water structure forming agents,
     sorbitol and fructose, decreased the soly. Concerning the
     complex const. between clotrimazole and .beta.-CD, it was the other way
     around. The connection between the slopes of the phase diagrams, the
     intrinsic soly. of clotrimazole and the complex const. was
     discussed. Nicotinamide decreased the soly. of
     .beta.-CD in the buffer soln. The results reported in this study are in
     disagreement with the claim that addn. of water structure forming agents
     to cyclodextrin solns. can be used to increase the total
     soly. of drugs.
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ANSWER 9 OF 15 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1991:478756 CAPLUS

115:78756 DOCUMENT NUMBER:

Effect of hydrotropic substances on the complexation TITLE:

of sparingly soluble drugs with cyclodextrin derivatives and the influence of cyclodextrin complexation on the pharmacokinetics of the drugs

AUTHOR (S): Mueller, B. W.; Albers, E.

CORPORATE SOURCE: Dep. Pharm., Christian Albrecht Univ., Kiel, D-2300/1,

Germany

Journal of Pharmaceutical Sciences (1991), 80(6), SOURCE:

599-604

CODEN: JPMSAE; ISSN: 0022-3549

DOCUMENT TYPE: Journal

LANGUAGE: English

The influence of hydrotropic compds. on complex formation by 2-hydroxypropyl .beta.-cyclodextrin (HP-.beta.-CD) was investigated with methyltestosterone (MeT). Various representatives of the lyotropic series were used for this purpose. Additive hydrotropic effects were obsd. for nicotinamide and urea, which disrupt the water structure, while structure formers such as sorbitol exerted neg. effects. The effects of hydrotropic substances on the phase soly . relationships of MeT showed that inclusion complex formation with HP-.beta.-CD depends on the degree of ordering of the solvent and is apparently subject to entropy effects. Combined systems comprising HP-.beta.-CD and excipients with various underlying solubilizing principles were also investigated. Combination of HP-.beta.-CD with conventional solubilizers, such as 1,2-propylene glycol or sodium deoxycholate, reduced the solubilization capacity of HP-.beta.-CD. Competitive displacement of the inclusion mol. from its HP-.beta.-CD complex by sodium deoxycholate suggested that cholesterol participates in the release mechanism of the inclusion mol. under in vivo conditions. The spontaneous release of complexed drug mols. could indirectly be shown on the basis of the spontaneous action of a complexed dihydropyridine deriv. after i.v. administration in rats. The bioavailability of an investigational drug in cynomolgus monkeys could be enhanced sevenfold by inclusion complexation with HP-.beta.-CD.

ANSWER 10 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:69087 CAPLUS

DOCUMENT NUMBER: 114:69087

TITLE: Solubility modulated drug delivery system INVENTOR (S): McClelland, Gregory A.; Zentner, Gaylen M.

PATENT ASSIGNEE (S): Merck and Co., Inc., USA

U.S., 12 pp. Cont.-in-part of U.S. Ser. No. 100,664, SOURCE:

abandoned. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE ----------A 19900807 US 1989-348099 US 4946686 19890501 ZA 8807009 19890830 ZA 1988-7009 19880920 Α PRIORITY APPLN. INFO.: US 1987-100664 19870924

A controlled-release drug delivery device comprises (1) a core compn. contg. a controlled-release soly. modulating units surrounded by a water-insol. coat contg. .gtoreq.1 pore-forming additive dispersed throughout the coat or dispersed in an individual matrix substrate and an active ingredient and (2) a water-insol. microporous wall surrounding the core compn. and prepd. from a water-permeable polymer impermeable to solute and .gtoreq.1 water-leachable pore forming additive dispersed throughout the wall. The soly. modulating agent can be an acid, a base, a complexing agent, or a surfactant. Lactose and Na dodecyl sulfate (SDS) were granulated and coated with cellulose acetate butyrate soln. to obtain controlled-release SDS followed by sorbitol soln. coating Simvastatin, mannitol, SDS, and controlled-release SDS were granulated and formed into core tablets and coated with cellulose acetate butyrate soln., followed by sorbitol soln. coating.

ANSWER 11 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:49567 CAPLUS

DOCUMENT NUMBER: 114:49567

TITLE: Dihydropyridine derivative redox systems for

brain-targeted drug delivery

INVENTOR(S): Bodor, Nicholas S. PATENT ASSIGNEE(S):

University of Florida, USA Eur. Pat. Appl., 120 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent English

LANGUAGE:

SOURCE:

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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PATENT NO.
                     KIND DATE
                                           APPLICATION NO. DATE
                      A2 19890816
    EP 327766
                                          EP 1988-312016 19881219
                      A3 19900926
B1 19980408
    EP 327766
    EP 327766
        R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
                                                           19871230
    US 5002935
                      A 19910326
A1 19940823
                                       US 1987-139755
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    CA 1331564
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19981001
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                                                            19881228
                      A2 19891128
    JP 01294663
                                          JP 1989-37
                                                            19890104
                      B2
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                          19891004
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                                           EP 1989-302719 19890320
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    EP 335545
                      A3
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                           19930609
    EP 335545
                      B1
    EP 335545
                     B2
                          19980923
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                                       AT 1989-302719 19890320
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                           19930615
                           19941101
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                                                            19891103
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                                           US 1989-448655
                                                            19891211
PRIORITY APPLN. INFO.:
                                        US 1987-139755 A 19871230
                                        US 1988-174945 A 19880329
CA 1988-585791 A 19881213
                                        IE 1988-3717
                                                         A 19881213
                                                       A 19881219
                                        EP 1988-312016
                                        IE 1989-810
                                                         A 19890314
                                        EP 1989-302719
                                                         A 19890320
    US 1989-431222 A2 19891103
Inclusion complexes of hydroxypropyl, hydroxyethyl, glucosyl, maltosyl or
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maltotriosyl derivs. of .beta.- or .gamma.- cyclodextrin with the reduced, biooxidizable, blood-brain barrier penetrating, lipoidal forms of dihydropyridine pyridinium salt redox systems for brain-targeted drug delivery provide a means for stablizing the redox systems, particularly against oxidn. The redox inclusion complexes also provide a means for decreasing initial drug concns. in the lungs after administration of the systems, leading to decreased toxicity. In selected instances, complexation results in substantially improved water soly. of the redox systems as well. The dihydropyridine lipidal forms are e.g. 1-methyl-3[[N-.beta.-[3,4-bis(pivalyloxy)phenyl]ethylcarbam amoyl}}-1,4-dihydropyridine and 3-hydroxy-17.beta.-[(methyl-1,4dihydropyridin-3-yl)carbonyl]oxyectra-1,3,5(10)-triene (E2-CDS). the soly. of E2-CDS-2-hydroxypropyl .beta. -cyclodextrin complexes was .apprx.30 mg/mL vs. 0.0002 my/mL for E2-CDS. In Spraque-Dawley rats, the lung level of an quaternary ammonium salt after i.v. administration of the complex was lower than that after i.v. administration of E2CDS.

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L9 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2003 ACS
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ACCESSION NUMBER: 1991:12071 CAPLUS

DOCUMENT NUMBER: 114:12071

TITLE: Molecular behavior and dissolution characteristics of

uracil in ground mixtures

AUTHOR(S): Baba, Kazuhiko; Takeichi, Yohichiro; Nakai, Yoshinobu CORPORATE SOURCE: Pharm. Res. Lab., Taiho Pharm. Co., Ltd., Tokushima,

771-01, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1990), 38(9),

2542-6

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal LANGUAGE: English

AB Ground mixts. contg. uracil were prepd. by using various additives such as celluloses, proteins, cyclodextrins, enteric-coating agents and inorg. compds. in a planetary ball mill. The amorphous state of uracil was obsd. in the x-ray diffraction patterns of some of the ground mixts.

The results of IR anal. indicated deprotonation of uracil after 30 h grinding with Na polyglutamate. All ground mixts. showed the transient supersatn. of uracil in dissoln. studies. The initial amt. of uracil dissolved from the 30-h ground mixts. with Na benzoate derivs., Et cellulose, hydroxypropyl Me cellulose acetate succinate and proteins was 2.5-9-fold that dissolved from intact uracil. The crystallinity and soly. of uracil in the ground mixts. were affected by the mixing ratio, grinding time and moisture content of the additive.

ANSWER 13 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1990:446267 CAPLUS

DOCUMENT NUMBER:

113:46267

TITLE:

Pharmaceutical formulations for parenteral use containing cyclodextrins and dihydropyridine

redox systems

INVENTOR(S):

Bodor, Nicholas S.

PATENT ASSIGNEE(S): SOURCE:

University of Florida, USA Eur. Pat. Appl., 125 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	TENT NO.		KIND	DATE		APP	LICATION	NO.	DATE
EP	335545		A2	19891004	Į	EP	1989-302	 719	19890320
EP	335545		A3	19900926	;				
	335545								
EP	335545		B2	19980923	}				
	R: AT,					R, I	T, LI, L	U, NL	, SE
US	4983586	•	À	19910108	}	ÚS	1988-174	945	19880329
EP	327766		A2	19890816	i	EP	1988-312	016	19881219
	327766								
	327766								
	R: AT,	BE, C	H, DE	, ES, FR,	GB, G	R, I	T, LI, L	U, NL	, SE
AT	90200	-	E	19930615	;	ΑT	1989-302	719	19890320
AU	8931762		A1	19890727	,	ΑU	1989-317	62	19890320 19890328
AU	618995		B2	19920116	;				
CA	1336498		A1	19950801	_	CA	1989-594	911	19890328 19890329
JP	02009825		A2	19900112	!	JΡ	1989-779	38	19890329
JР	2643426		B2	19970820)				
ZA	8902315		A	19901228	}	ZA	1989-231	5	19890329
US	5017566		Α	19910521		US	1989-431	222	19891103
US	5024998		A	19910618	}	US	1989-448	655	19891103 19891211
PRIORIT	Y APPLN.	INFO.:			US	198	8-174945	A	19880329
					EP	198	8-312016	A	19881219
					US	198	7-139755	A2	19871230
					CA	198	8-585791	Α	19881213
					ΙE	198	8-3717	A	19881213
					ΙE	198	9-810	A	19890314
					EP	198	9-302719	Α	19890320
									19891103
AB Aq	. parente:	ral so	lns. d	of drugs	which	are	insol. o	r only	y sparingly

ΑI and/or which are unstable in water, are combined with a cyclodextrin deriv. to provide a means for alleviating problems assocd. with drug pptn. at the injection site and/or in the lungs or other organs following parenteral administration. Another approach is use of the dihydropyridine-pyridinium redox delivery system. A large no. of examples are given for synthesis of dihydropyridine and pyridinium derivs. of drugs. Data are also presented showing drug solubilization by cyclodextrin derivs.

ANSWER 14 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1990:42623 CAPLUS

Correction of: 1989:101799 112:42623

DOCUMENT NUMBER:

Correction of: 110:101799

TITLE:

Pharmaceuticals containing fat-soluble vitamins and

methylated cyclodextrin to improve

solubility

INVENTOR(S):

Furukawa, Mikio; Hara, Kenji

PATENT ASSIGNEE(S):

SOURCE:

Kao Corp., Japan Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 63083021 A2 19880413 JP 1986-227712 19860926 PRIORITY APPLN. INFO.: JP 1986-227712 OTHER SOURCE(S): MARPAT 112:42623

An oral pharmaceutical contains fat-sol. vitamins and methylated cyclodextrin I (A = H, Me; n = 6-9). A mixt. of methylated .beta.-cyclodextrin and vitamin A in H2O was stirred until complete dissoln. occurred. The resulting compd. was used in vitamin formulation. An oral liq. contained vitamin B1 nitrate 5, vitamin B2 phosphate 5, vitamin B5 5, nicotinamide 20, inositol 50, caffeine 50, vitamin A-I inclusion compd. 1, vitamin E-I inclusion compd. 10, and vitamin D-I inclusion compd. 0.5 mg in 100 mL H2O.

L9 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1989:101799 CAPLUS

DOCUMENT NUMBER:

110:101799

TITLE:

Pharmaceuticals containing fat-soluble vitamins and

methylated cyclodextrin to improve

solubility

INVENTOR(S):

Furukawa, Mikio; Hara, Kenji

PATENT ASSIGNEE(S):

Kao Corp., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ---------JP 63083021 A2 19880413 JP 1986-227712 19860926

OTHER SOURCE(S):

MARPAT 110:101799 AB An oral pharmaceutical contains fat-sol. vitamins and methylated cyclodextrin I (A = H, Me; n = 6-9). A mixt. of methylated .beta.-cyclodextrin and vitamin A in H2O was stirred until complete dissoln. occurred. The resulting compd. was used in vitamin formulation. An oral liq. contained vitamin B1 nitrate 5, vitamin B2 phosphate 5, vitamin B5 5, nicotinamide 20, inositol 50, caffeine 50, vitamin A-I inclusion compd. 1, vitamin E-I inclusion compd. 10, and vitamin D-I inclusion compd. 0.5 mg in 100 mL H2O.